Amendments to the Specification:

Please replace the paragraph beginning at page 4, line 18 as with the following amended paragraph:

If I/O hub 108 determines that the new write data unit does not correspond to the cache line address of any of the cache lines in write cache 110, I/O hub 108 reads a 128-byte segment of data from main memory 106. Portions of the 128-byte segment will have the same addresses as the data in the new write data unit. A ~~merge engine 130~~ merge engine 134 merges the 128-byte segment with the new write data unit by overwriting portions of the 128-byte segment with the new write data unit. The modified 128-byte segment is then written into a cache line in write cache 110.